

OIPE

RAW SEQUENCE LISTING

DATE: 10/16/2001

PATENT APPLICATION: US/09/967,301

TIME: 15:36:03

Input Set : A:\Pa01111.app

Output Set: N:\CRF3\10162001\I967301.raw

3 <110> APPLICANT: Stubbs, Simon L.
4 Jones, Anne E.
5 Michael, Nigel P.
6 Thomas, Nicholas
8 <120> TITLE OF INVENTION: Fluorescent Proteins
10 <130> FILE REFERENCE: PA0111
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/967,301
13 <141> CURRENT FILING DATE: 2001-09-28
15 <150> PRIOR APPLICATION NUMBER: GB 0109858.1
16 <151> PRIOR FILING DATE: 2001-04-23
18 <160> NUMBER OF SEQ ID NOS: 19
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 717
24 <212> TYPE: DNA
25 <213> ORGANISM: Aequorea victoria
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29 gatgttaatg ggcacaaatt ttctgtcagt ggagagggtg aaggatgatgc aacatacggg 120
30 aaacttaccc ttaaatttat ttgcactact ggaaaactac ctgttccatg gccaacactt 180
31 gtcactactt tctcttatgg tgttcaatgc ttttcaagat acccagatca tatgaaacgg 240
32 catgactttt tcaagagtgc catgcccga ggttatgtac aggaaagaac tatatttttc 300
33 aaagatgacg ggaactacaa gacacgtgct gaagtcaagt ttgaagggtga tacccttggt 360
34 aatagaatcg agttaaagg tattgatttt aaagaagatg gaaacattct tggacacaaa 420
35 ttggaataca actataactc acacaatgta tacatcatgg cagacaaaaca aaagaatgga 480
36 atcaaagtta acttcaaaat tagacacaac attgaagatg gaagcgttca actagcagac 540
37 cattatcaac aaaatactcc aattggcgat ggccctgtcc tttaccaga caaccattac 600
38 ctgtccacac aatctgcctt ttcgaaaagat cccaacgaaa agagagacca catggtcctt 660
39 cttgagtttg taacagctgc tgggattaca catggcatgg atgaactata caaatag 717
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43 <211> LENGTH: 238
44 <212> TYPE: PRT
45 <213> ORGANISM: Aequorea victoria
47 <400> SEQUENCE: 2
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51 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
52 20 25 30
54 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
55 35 40 45
57 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe
58 50 55 60
60 Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
61 65 70 75 80
63 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
64 85 90 95
66 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val

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67          100          105          110
69 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
70          115          120          125
72 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
73          130          135          140
75 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
76 145          150          155          160
78 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
79          165          170          175
81 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
82          180          185          190
84 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
85          195          200          205
87 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
88          210          215          220
90 Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
91 225          230          235
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100 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
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107 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
108          20          25          30
110 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
111          35          40          45
113 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu
114          50          55          60
116 Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
117 65          70          75          80
119 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
120          85          90          95
122 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
123          100          105          110
125 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
126          115          120          125
128 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
129          130          135          140
131 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
132 145          150          155          160
134 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val
135          165          170          175
137 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
138          180          185          190

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140 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
141          195          200          205
143 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe Val
144      210          215          220
146 Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
147 225          230          235
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156 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic✓
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160 Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
161  1          5          10          15
163 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
164      20          25          30
166 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
167      35          40          45
169 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu
170      50          55          60
172 Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Arg
173  65          70          75          80
175 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
176      85          90          95
178 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
179      100         105         110
181 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
182      115         120         125
184 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
185      130         135         140
187 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
188 145          150          155          160
190 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Gly Val
191      165         170         175
193 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
194      180         185         190
196 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
197      195         200         205
199 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
200      210         215         220
202 Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
203 225          230          235
206 <210> SEQ ID NO: 5
207 <211> LENGTH: 42
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:

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212 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic ✓
213 oligonucleotide
215 <400> SEQUENCE: 5
216 ggtacgggcc gccaccatga gtaaaggaga agaacttttc ac 42
219 <210> SEQ ID NO: 6
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221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic ✓
226 oligonucleotide
228 <400> SEQUENCE: 6
229 ggtacggggtt aaccggtttt gtatagttca tccatg 36
232 <210> SEQ ID NO: 7
233 <211> LENGTH: 45
234 <212> TYPE: DNA
235 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic ✓
239 oligonucleotide
241 <400> SEQUENCE: 7
242 ggtacgggcc gccaccatgg gatccaaagg agaagaactt ttac 45
245 <210> SEQ ID NO: 8
246 <211> LENGTH: 37
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic ✓
252 oligonucleotide
254 <400> SEQUENCE: 8
255 ccaacacttg tcactactct ctcttatggt gttcaat 37
258 <210> SEQ ID NO: 9
259 <211> LENGTH: 37
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic ✓
265 oligonucleotide
267 <400> SEQUENCE: 9
268 attgaacacc ataagagaga gtagtgacaa gtgttg 37
271 <210> SEQ ID NO: 10
272 <211> LENGTH: 45
273 <212> TYPE: DNA
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic ✓
278 oligonucleotide
280 <400> SEQUENCE: 10
281 ccaacacttg tcactactct cacctatggt gttcaatgct ttica 45

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Input Set : A:\Pa011111.app
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284 <210> SEQ ID NO: 11
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286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
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291     oligonucleotide
293 <400> SEQUENCE: 11
294 tgaaaagcat tgaacacccat aggtgagagt agtgacaagt gttgg           45
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298 <211> LENGTH: 45
299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic/
304     oligonucleotide
306 <400> SEQUENCE: 12
307 gacaaacaaa agaattggaat caaagccaac ttcaaaatta gacac           45
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311 <211> LENGTH: 45
312 <212> TYPE: DNA
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic/
317     oligonucleotide
319 <400> SEQUENCE: 13
320 gtgtctaatt ttgaagttgg ctttgattcc attcttttgt ttgtc           45
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324 <211> LENGTH: 35
325 <212> TYPE: DNA
326 <213> ORGANISM: Artificial Sequence
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329 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic/
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332 <400> SEQUENCE: 14
333 caacattgaa gatggaggcg ttcaactagc agacc           35
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338 <212> TYPE: DNA
339 <213> ORGANISM: Artificial Sequence
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346 ggtctgctag ttgaacgcct ccattctcaa tgttg           35
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350 <211> LENGTH: 36
351 <212> TYPE: DNA
352 <213> ORGANISM: Artificial Sequence

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/967,301

DATE: 10/16/2001

TIME: 15:36:04

Input Set : A:\Pa011111.app

Output Set: N:\CRF3\10162001\I967301.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number